

Low-Cost 630 Stump Cutter Chews' Em Out in Minutes!

Looking for low-cost stump removal? Take a look at Vermeer's Model 630 Stump Cutter. It's the Diggin' Dutchman's smallest unit . . . but what a fast, man-size, chewing-out job it can do! And, even more important, you save thousands of dollars annually. One man does the whole job in minutes. No chopping . . . no sawing . . . no hand labor. A high-speed cutting wheel does all the work, you merely handle the all-hydraulic controls. Write "The Diggin' Dutchman" for more information and complete literature. Better yet, tell him you want a demonstration.

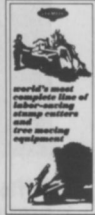


Another Stump Cutter From . . .

THE DIGGIN' DUTCHMAN

VERMEER TREE EQUIPMENT DIVISION

7209 W. Washington • Pella, Iowa 50219



630 Stump Cutter—chews out stumps 6" below the surface, 50" wide without repositioning. Designed for hard to reach areas—backyards, cemeteries, thru gates, next to buildings. Tows behind any car, truck, tractor or jeep.

For More Details Circle (109) on Reply Card

Park and Grounds Institute Slated Oct. 30-Nov. 2

"A Practical Approach to Maintenance" is the theme of the Second Annual National Institute on Park and Grounds Maintenance to be held at the Hotel Muehlebach, Kansas City, Mo. on October 30 through November 2, 1972.

The conference will attract hundreds of top administrators in the park, golf course, campus, cemetery and institutional field.

Among the nationally known authorities who will be on the program are: Cornell University extension program leader Dr. James Dewey, who will give updated information on pesticides and pollution; Briarwood Country Club Superintendent Paul Voykin, speaking on "Overgrooming is Overspending"; U.S.G.A. Green Section Mid-Continent Director Lee Record, with ideas about maintenance and gadgets; William Landahl, director, Jackson County Park Dept., Mo., who will give a presentation on lake shore maintenance, and many more.

In addition to maintenance topics, the new regulations on Occupational Safety will be explained by a U. S. Dept. of Labor representative.

The meeting format includes general sessions, two special panels on mowing and off season maintenance, resource workshop sessions on various topics, a tour and exhibits.

The Kansas City Park and Recreation Dept. will host a tour of its facilities with the emphasis on maintenance operations. The tour will

include an opportunity to see park department operated golf courses.

Last year's Institute had excellent exhibits of grounds supplies and equipment. Exhibits this year will provide the largest display of park and grounds products and equipment in the country.

Products to be exhibited include mowers, irrigation equipment, seeders, spreaders, rollers, chemicals, fertilizers, turnstiles, chain saws, etc. Many firms will display new 1973 lines for the first time.

LTV Aerospace Corporation Announces Commercial Group

LTV Aerospace Corporation of Dallas has announced that its agricultural products division has been made part of the company's new commercial group.

The move was part of a major internal reorganization of LTV Aerospace which focused on formation of the commercial group and realignment of other operations.



BEEBLE ROLLER — a stripped down Volkswagen does yeoman work as a turf roller for Willow Grass Farms, Fort Wayne, Ind. A 3-in. sprocket on rear axles and an 8-in. sprocket on the rear rollers gear the useful rig down to a practical speed. Steering is eased by a power steering pump driven off the fan belt.

ASPA Visits Canada In Force



Officer team for the '73 ASPA program: (l-r) Jack Kidwell, president; Dale Habenicht, vice-president; John Nunes, director; Ted Bosgraph, director; Jerry Brouwer, director; and Charles A. Davis, Jr., treasurer.

U.S. sod producers joined Canadian growers in July at Toronto, Ontario, Canada, for a major field day and tour.

Host for the event, the annual summer meeting of the American Sod Producers Association, was the Nursery Sod Growers Association of Ontario, with a membership of veteran cultivated sod producers.

Visitors, approximately 300, early in the tour became accustomed to discussions centered on 1000-acre and bigger sod operations. They also found that mechanization of harvesting equipment on a major scale is apparently the norm for this area of Canada. Toronto is probably the sod capital of the world today, in terms of percentage of sod used for new construction, possibly also in total

used per season.

At Beder's Turf Farms Ltd., near Beeton, for example, visitors saw three Brouwer sod harvesters in one field in what proved to be a normal Beder harvesting day. Sod is rolled prior to harvesting and trucks loaded in a pallet operation. Two forklifts were in use to maintain pace with the harvesters.

In a second Beder operation two harvesters worked full time on a muck soil field. Beder reported that muck ranged up to 40 feet in depth.

Other farms visited included the M. Smilsky Farm Ltd. at Cookstown, where special loading and transporting equipment were featured, along with sod harvesting using a Ryan cutter with roller.

A unique trailer design for haul-

ing (rather than towing) a fork lift was demonstrated at the Evans Turf Farm Ltd. at Gormley. This consisted of reinforcing and lowering the rear of a trailer bed and adding fold-down ramps for easy loading of the fork list.

Field demonstrations of sod harvesters proved a key feature of the Canadian event. On hand with demonstrator units were: John Nunes Mechanical Harvesting Co., Patterson, Calif.; Princeton Turf Harvester, Heightstown, N.J.; Beck Manufacturing Co., Auburn, Ala.; and Brouwer Turf Equipment, Ltd., Keswick, Ontario, Canada. Visitors also saw the Brouwer units in production at Brouwer's plant which is located on the farm.

Formal business of the ASPA an-



John Nunes, on tractor, demonstrates his Nunes harvester for growers.



Growers discuss Beck's Big Roll System which combines harvesting and installation.

MERION . . . Still your best choice whether used alone or in mixtures — in seed and in sod.



THE MORE THE MERION... THE BETTER THE MIXTURE!

KENTUCKY BLUEGRASS



MERION BLUEGRASS ASSOCIATION, 101 PARK AVENUE, NEW YORK 10017

For More Details Circle (124) on Reply Card

annual summer meeting included election of officers as follows: Jack L. Kidwell, Kidwell Turf Farms, Culpeper, Va., pres.; Dale Habenicht, H & E Sod Farm, Momence, Ill., vice-pres.; Charles A. Davis, Jr., Wharton Turfgrass, Inc., Wharton, Tex., treas.; and new directors, Ted Bosgraph, Bluegrass Sod Farms, Hudsonville, Mich., Jerry Brouwer, Brouwer Turf Equipment, Ltd., Keswick, Ontario, Canada and Davis. Other directors retaining office are John Nunes, Patterson, Calif., William Latta, Kansas City, and Tobias Grether, Carmarillo, Calif., Grether was outgoing president.

Dr. Henry Indyk, New Brunswick, N.J., continues as executive secretary.



Special trailer bed, with lowered and reinforced rear end plus folding ramp, is used by Evans to haul forklift on sod deliveries, Picture at left shows the forklift in loaded position.



New model of Princeton Sod Harvester.



Brouwer Sod Harvester demonstration unit.



Developer, G. I. Morrow, inspects his invention, a unique brushroller. This picture, taken by the Los Angeles Department of Water and Power, shows that the modified spiked road compactor can pulverize and compress more than 8,000 sq. ft. of hillside brush an hour.

Giant Brushroller Compresses Brush

A NEW IDEA for clearing dried brush saves time and money, is a boon for soil conservation, and aids in fire prevention. It was developed by G. I. Morrow, West Valley Operating District superintendent for the Los Angeles Department of Water and Power.

Morrow's weighty idea turned out to be a 3,860 pound modification of the large spiked road building rollers seen at highway construction projects.

The brushroller consists of two tandem steel plate rollers with six inch staggered spikes. Lowered by a D7 tractor down a brush-covered hillside, the roller knocks down vegetation, breaks it up and pushes it into the ground, clearing a seven foot path in one pass.

The winch then pulls the brushroller to the top of the slope and moves it for overlapping sweeps.

Rncico and Stone Canyon Reservoirs in the Los Angeles area were original testing ground for the invention. It proved effective enough to cover 8,400 square feet an hour, an impossible rate if performed by less efficient hand methods.

Another important feature of Morrow's invention is that it eliminates having to clean up mounds of brush since the brush is pulverized and compressed. The compression aids in fire prevention and soil conservation since combustion is difficult:

the packed vegetation blocks oxygen while holding soil in place. Hand cutting can only remove some of the loose fuel that could catch fire.

Brush within 100 feet of any structure must be maintained between three and 18 inches above the ground, according to Fire Department regulations in Mountain Fire Districts. The brushroller meets these requirements best during the dry fire season when brush is easy to crush.

If dried brush is too thick for the roller under normal conditions, the roller's tanks can hold 370 gallons of water to give a total crushing force of more than three tons.

Although this new method of brush clearing will become widespread within the Department of Water and Power, there is one limitation that makes it difficult to use in all locations. The accompanying tractor must be able to travel along a crest or use some level road for necessary balance. Most locations do, however, supply the proper conditions.

As with most inventions, the brushroller wasn't developed without some problems. A prototype constructed earlier proved too light to be effective. Jim Malch, blacksmith at the West Valley District Headquarters, reconstructed the drums with plating twice as heavy as the prototype.

Experimental Irrigation Utilizes "Doze" Concept

Brighton By-Products Company, Inc. has been appointed a distributor of Du Pont Experimental Irrigation Tubing. The tubing utilizes an unique "ooze" release system consisting of flexible porous plastic tubing that places moisture in the root zone with maximum efficiency.

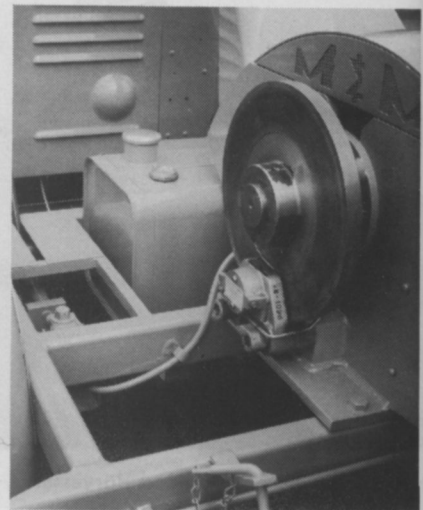
Brush Chipper Firm Includes Disc Brakes As Option

As an option in the redesign of the brush chipper, Mitts & Merrill has included airplane-type disc brakes on the chipper cylinder. The system consists of a brake disc keyed to the shaft of the chipper cylinder, caliper mounted double brake pads, hydraulic master cylinder, connecting hydraulic lines, trip levers, spring loaded actuator, trigger mechanism and ignition system interlock switch.

Mitts & Merrill personnel explain that the actuator must be cocked before the brush chipper engine can be started. In case of an emergency the operator need only activate one of the three trip levers located at the sides and across the bottom of the throat of the feed chute. The brake pads clamp the rotating disc bringing it and the chipper cylinder almost instantly to a full stop.

The stopping force required is almost identical to that required by a car traveling at 60 mph, a Mitts & Merrill spokesman said.

Here is the disc brake with the protective housing removed to show the disc, calipers, hydraulic line and handle used to cock the master cylinder actuator. An interlock switch to the engine ignition is open unless the brake actuator is cocked.





NEW IMPROVED GRASSHOPPER: M. J. Scott Co., Inc., Hutchinson, Kans.

Wider turf tires give greater stability and a five-inch wider stance to this riding mower. This unit is built to allow actual trim-cutting in confined areas. The steering mechanism is simply two handles, each controlling the direction and speed of a drive wheel. A new hinged seat permits easy access to the drive mechanism. The mower deck mounting is now a double-yoke instead of a single. Other improvements include a repositioned throttle control for easy access and a solid 3/16-inch metal rear section. For more details, circle (701) on the reply card.



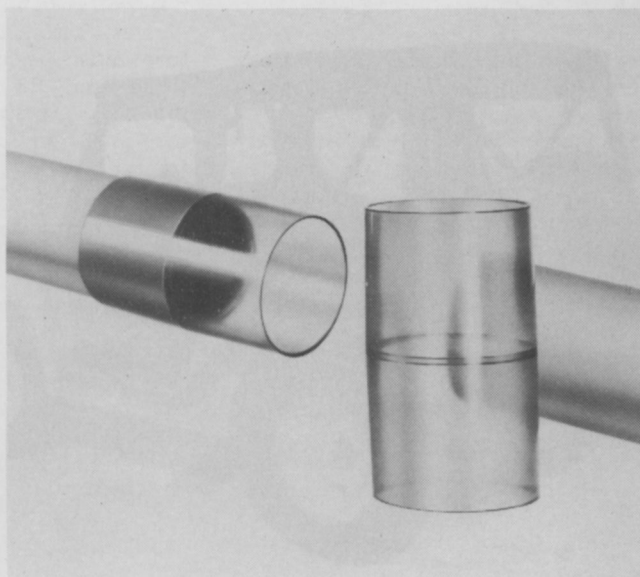
VACUUM-THATCHER: Arctic Mizer Manufacturers, Inc., Cudahy, Wisc.

This fall, use this vacuum-thatcher to remove all debris and let sunlight, moisture, weed control mixtures and fertilizer get to the roots easier. Follows directly behind an articulated front wheel to keep unit from cutting corners. It's powered by a 3½ hp, 4 cycle gas engine that drives both the 4-tine spring wire thatching brushes and the vacuum/blower. Non-scalp brushes are quickly changeable and reversible for longer life. Height is adjustable. Model 200R measures 56 inches long, 39 inches wide and 30 inches high. It weighs only 125 pounds. For more details, circle (702) on the reply card.



TWO PROTURF PRODUCTS: O. M. Scott & Sons, Marysville, Ohio

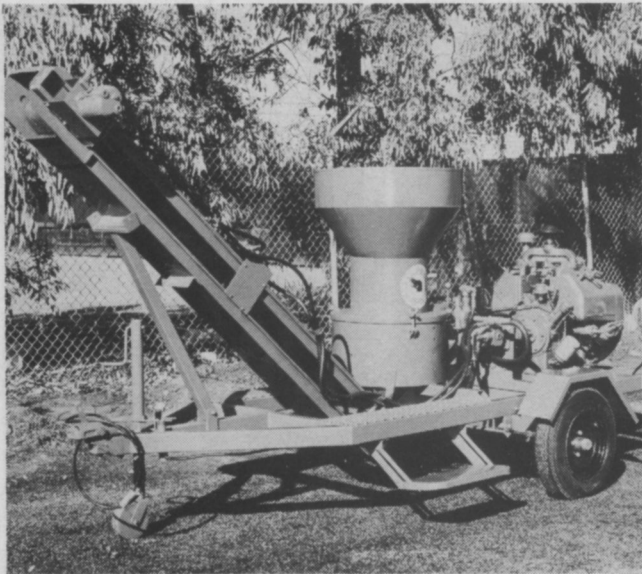
Here's a long-lasting ProTurf Super Fairway Fertilizer (34-3-7-3) that contains sulfur as SO_3 . It's a blend of quick-release nitrogen with special slow-release nutrient nuggets. No need for filler, no risk of burning when used as directed because nutrient release is chemically controlled. Designed for use on bermudagrass fairways and grasses of the Pacific Northwest. ProTurf Fungicide II is a ready-to-use granular that prevents and controls pythium blight and gray snowmold. It is non-mercurial and may be applied with a regular drop spreader. Granules eliminate any drift problems. For more details, circle (703) on the reply card.



GSR COLOR GUARD SYSTEM: R & G Sloane Mfg. Co., Sun Valley, Calif.

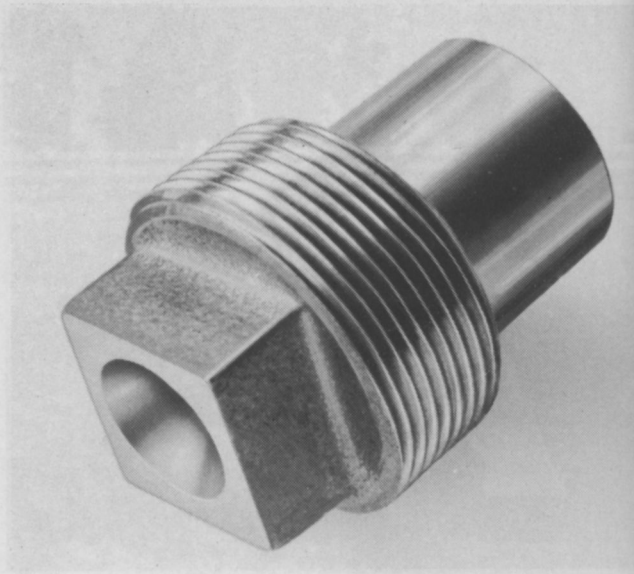
Eliminate the chief cause of leaks in PVC pipelines, weak joints. Potential leaks are spotted instantly. Improperly cemented joints are visible with this new method of joining plastic pipe and fittings in water distribution systems. Installers can tell at a glance if joints are properly assembled and free from leaks without immediate pressure testing. Pipeline can be buried much sooner. Employs a new line of deep socket fittings made of clear PVC, new Color Guard primers and cements and new primer applicators to speed joining. For more details, circle (704) on the reply card.





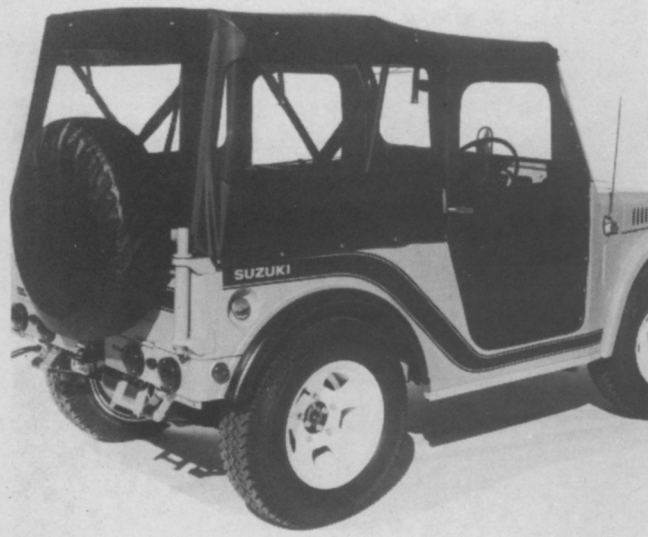
CLIPPER CHIPPERS: Lundin-Milner, Inc., Los Altos, Calif.

If you're looking for a chipper that is safe, reliable, long-wearing and low in maintenance, look no further. There's a Clipper Chipper model to fit the needs of everyone. Operation is similar to the ordinary kitchen disposal. Machine will handle such materials as wood, paper products, plastics and tin cans. Will accept up to 3-inch diameter material. Bar and cutting blades are made of Plowshare 1060 steel to produce long lasting cutting edges. When machine jams it shuts off automatically. Four versions are available: 8 hp, direct belt drive Chipmunk, the Electric Beaver powered by a 10 hp, 220 volt, 3-phase electric motor, Beaver Tractor PTO mounted on runners, and the Trailer Mounted Beaver powered by a V-4 25 hp Wisconsin engine. For more details, circle (705) on the reply card.



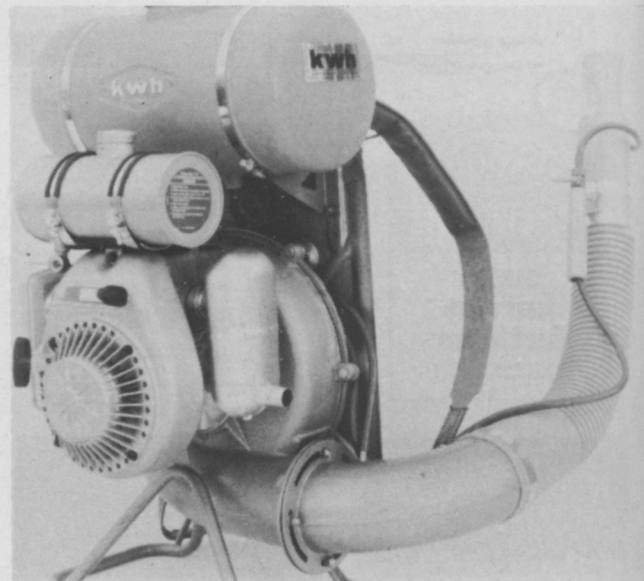
MINI-SIZED MAXI-NOZZLES: Bete Fog Nozzle, Inc., Greenfield, Mass.

A new line of spray nozzles that take no more room than pipe plugs are now available. Projection is extremely small because part of the nozzle is within the pipe fitting. Called STUBBIES, the nozzles can be used with standard pipe couplings to make female thread nozzles, with elbows to make right angle nozzles, or with tees or crosses for multiple installations. Stock materials are brass and Type 316 stainless steel. Available in three cone angles, 60, 90, and 120 degrees with flow rates from 3 to 300 gpm per nozzle. For more details, circle (706) on the reply card.



SWING-AWAY TIRE CARRIER: I.E.C. — Suzuki of San Diego, Calif.

Here's a big convenience feature, a swing-away tire carrier, that adds pizzazz to the Suzuki Brute IV 4-wheel drive. Operated by a simple turn of the locked hinge carrier at the rear, the spare tire is kept clear of obstructions in tight, timbered, or rocky terrain and saves space in the interior for extra equipment. This compact vehicle also features a dual-stroke action engine, oil injection system, 4-speeds for on or off road driving and up to 30 mpg economy. For more details, circle (707) on the reply card.



MISTBLOWER: Vandermolen Corporation, Livingston, N.J.

The most powerful back pack mistblower available, according to the manufacturer, is the new 79 M Mistblower. It generates an air volume of 780 cubic feet and gives a vertical reach of 40 feet. Construction is of magnesium alloy with a minimum of plastic parts for strength and durability. Quality features include blow molded tapered air hose, chemical tank with four inch removable strainer, all brass taps and fittings and full length metal back plate. For more details, circle (708) on the reply card.



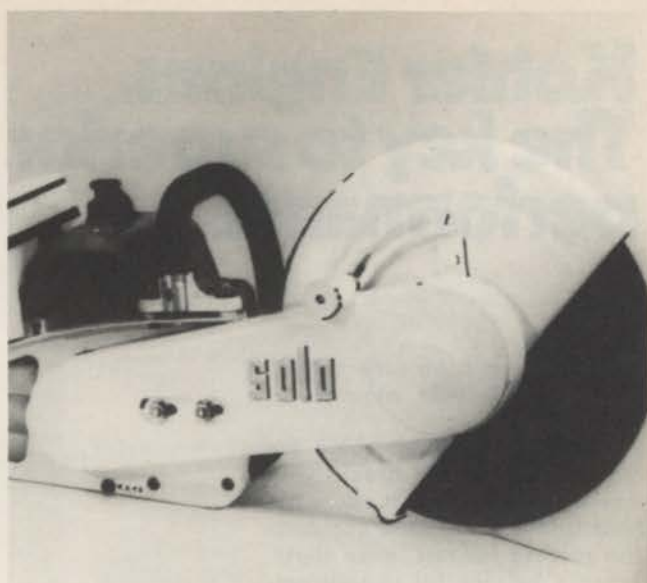
HARD HAT: Glendale Optical Company, Inc., Woodbury, N.Y.

Here's just the head protection needed to conform with the Occupational Health and Safety Act. This rugged, new Glendale safety cap combines optimum protection with comfort for the wearer. It conforms with all applicable safety standards. Cap features the IDS (Incremental Dissipation of Shock) 6-point suspension system. It combines nylon cord, nylon webbing with polyethylene straps to safely dissipate shock at four graduated levels of intensity. Contour ribs provide added strength. May be worn with both ear and eye protection equipment. Winter flame retardant liners may also be used. Available in a choice of colors. For more details, circle (709) on the reply card.



HYDROGRASSER: Reinco, Inc., Plainfield, N.J.

Models HG-15 and HG-25 are two new direct chassis mounted Hydrograssers introduced this year. The manufacturer claims that the direct frame to chassis capability greatly increases the versatility of the units and will permit a wider range of accessibility. Easier on-site handling as well as reduced maintenance and down time potential are features of this new concept. The one-unit chassis to frame mobility will increase the maneuverability when working on sloping or rough terrain. The units are available in 1500 and 2500 gallon sizes. For more details, circle (711) on the reply card.



ABRASIVE SAW: Solo Motors, Inc., Newport News, Va.

Tough cutting jobs are a breeze with this new abrasive unit that attaches to the 650AV chain saw. Two types of wheels — for stone, masonry, concrete, asbestos, or for steel, girders and other metals — are available. The unit is light-weight yet powerful enough to cut through material in short order. For extra protection, Solo's unconventionally large air filter is doubled piggyback-fashion. For more details, circle (710) on the reply card.



DISC BROOMS: Wayne Manufacturing Company, Pomona, Calif.

Nothing sweeps like a new broom and this broom is made of discs. Broom core can be assembled to specified needs with either polypropylene filaments or special oil tempered wire for light sweeping, average sweeping or extremely tough debris. Polypropylene filament provides excellent bend recovery and has maximum abrasion resistance properties. The filament and anchor wire are firmly locked in a heavy gauge still ring. Wire disc wire is crimped in two directions to provide added strength and broom flair. Complete interchangeability is a feature making each broom a custom design, if necessary. For more details, circle (712) on the reply card.



Kohler Engines. The key to superior performance.

Toughness is no surface thing with Kohler 4-cycle engines. It's designed-in.

Kohler engines combine the strength of cast iron blocks with engineering features that assure dependability. Automatic compression release for fast, easy starts. Dynamic balance for smooth performance, greater operator comfort. Kohler-built carburetor tailored to the engine.

Large-bore, short stroke design means maximum horsepower, less wear, longer use. All service points are readily accessible.

Kohler quality is backed by a worldwide service network. More than 800 trained U.S. distributors and 4,000 service centers, plus outlets in 65 countries.

Kohler 4-cycles, 4 to 24HP. Not only a rugged engine. But your key to performance, too. See your distributor or write Kohler Co., Kohler, Wis. 53044.



KOHLER ENGINES
Your key to performance.

— industry people on the move —

RICHARD W. STEWART, appointed assistant manager of technical services for Freeport Sulphur Company, a division of Freeport Minerals Company.

D. WES DAY, becomes president of Hometown, Inc. **JOHN H. KOPMEIER**, former president, becomes chairman of the board. A subsidiary of Hometown, Lawnhouse Products, Inc., markets a variety of lawn and garden care products.

Organizational changes at Allis-Chalmers include: **ELDRED W. (Swede) MUEHLHAUSEN** appointed merchandising manager, tractors; **JOHN N. MOORE** becomes manager, general service (he replaces **ROBERT HOWARD** who retired.); **P. NORMAN SWINFORD**, named manager, dealer service manpower; **W. E. (Bill) CARR**, appointed southeast regional manager of Allis-Chalmers Credit Corp.; **ROBERT M. HOBSON**, appointed manager of advertising, agricultural equipment division.

CHARLES J. PRIZER, named corporate general manager for engineering and environmental control, **DR. CLARENCE E. DENOON, JR.**, vice president for corporate ventures, assumes responsibility for licensing. Both are Rohm and Haas Company executives. Changes result from the recent death of **DONALD W. KENNY**, vice president.

JAMES JOLLEY, appointed general superintendent of construction for Venable Sprinkler Sales, Inc. He will direct the purchasing, ultimate delivery, fabrication activities and eventual installation at the job site.

JACK G. LOWENSTEIN, to assistant director of research and development for FMC Corporation's Niagara Chemical Division. He will be responsible for process development and formulations research.

PHELAN THOMPSON, named director of marketing for Sabre Saw Chain Ltd. He was involved in the introductory program for the 2001 saw chain. He will reside in Burlington, Ontario, Canada, headquarters of Sabre.

EVERETT W. HANSON, named president of W. A. Cleary Corporation. He moves up from the position of general sales and marketing manager.

KEITH M. ANDERSON and **DENNIS L. VEDDER** have formed A & V, Inc., a firm whose principal products are four Federally registered algacides.

WTT STAFF ADDITION: Roger E. Gilmore joins the advertising sales staff of WEEDS TREES and TURF and The Harvest Publish-



ing Company. Previously he managed the Redi-Rain irrigation division of Lakeshore Equipment Supply Company, Cleveland. He also served 3½ years as Turf Product Manager at Diamond Shamrock. Roger is a graduate of Bloomfield College and a native of New Jersey. He is married to the former Laraine Brunner of New Jersey. They have two sons. Gilmore will be headquartered at the Cleveland office. We want to welcome him to our staff and to this dynamic "Green Industry."

Your third step to healthier turf 3

Fall is the time to take it

If you're following the DuPont TERSAN 1-2-3 Disease Control Program, you've already got spring and summer turf diseases licked.

Now's the time to prevent fall diseases—take your third step to healthier turf, the application of TERSAN SP on tees, fairways and greens.

TERSAN SP gives superior control of Gray Snow Mold and Pythium. These diseases will be the major problem, depending on your area, during the fall and early winter months.

TERSAN SP, like the other DuPont TERSAN fungicides, is non-mercurial, low in human toxicity and has a large safety factor on turf.

Now is the time to take the third step in your DuPont Disease Control Program or, if you haven't been on it, it's the time to start. You'll find the TERSAN Program is highly effective, economical...and *complete*. Prevents or controls all major turf diseases on all common grasses all year long.

NOTE: Applications of DuPont TERSAN 1991 turf fungicide should be used in the late fall and early spring in areas where Fusarium Patch (Pink Snow Mold) is a problem.

Your golf course supplier has complete details on the program and a supply of TERSAN fungicides. Give him a call today.

With any chemical, follow labeling instructions and warnings carefully.



TERSAN[®] SP
TURF FUNGICIDE

WAR ON BRUSH (from page 24)

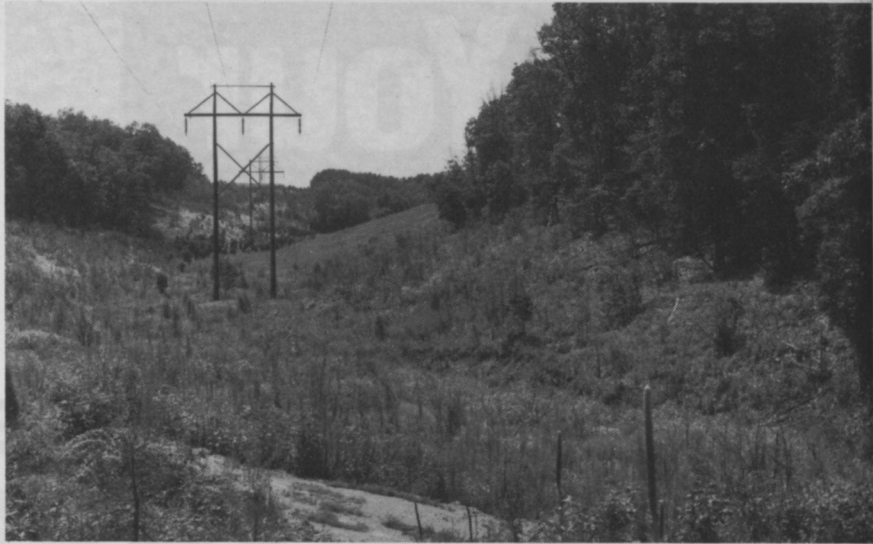
bad problem with persimmon. Banvel has given excellent control of all these species.

Users report that brush kill takes place a long time after application of Banvel.

"It seems to accumulate in the plant tissue," commented Richard Fields, manager of Velsicol's industrial vegetation control department and a Banvel expert. "It becomes part of the cell structure. Although we don't have a complete explanation of the phenomenon, that must be one reason why Banvel has a slower reaction to brush than what professional applicators are accustomed to. They are used to spraying one year and evaluating the next. But with Banvel, sometimes after one year, the whole tree is in bud."

Banvel enter the plant not only through the leaves and the bark, but through the roots as well. Applicators and researchers report that the chemical translocates from the roots throughout the plant. Sprays to the bark area and surrounding foliage enhance the product's activity. Basal stem applications may be made during dormancy. Root absorption is the key.

"Under normal conditions, the



A Potomac Edison line near Winchester, Virginia, one of the first areas where extensive experimental tests were carried out with Banvel. Note the near perfect brush control under the direction of Mike Watson, Potomac Edison forester.

rates used for brush control biodegrade in the soil in a matter of a few months," notes Fields.

The slower action of Banvel can be an advantage in reducing the number of complaints about the use of chemicals, where sudden "brown out" of vegetation during the spring and summer can alarm the public.

Some states, such as Maine, have made applications along highways and other highly visible rights-of-way.

Current Federal registrations include applications to watershed areas, drainage ditches, dam sites and other areas where wildlife and cattle inhabit.

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FOR WORK ALOFT UP TO 50 FT.
45 FT. FROM GROUND
TO BUCKET



THE SKYWORKER MODEL 1045 hydraulic aerial lift is built to provide pace setting versatility in line work and tree trimming. Ideal for lighting contractors, municipalities, utilities and tree care specialists who work at heights up to 50 Ft. For literature and technical data, write DEPT. WT-5.



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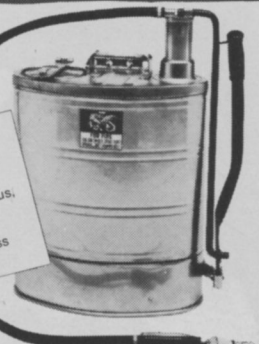
THE SKYWORKER

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Continuous,
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Stainless
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'The Dragon'

Spray-All

will spray it easier, better!

Standard extension tube reaches out and under otherwise inaccessible areas.

Three nozzle boom assembly shown at left, optional at extra cost.



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